

(FILE 'HOME' ENTERED AT 16:17:52 ON 23 FEB 2003)

FILE 'CAPLUS, USPATFULL, BIOSIS' ENTERED AT 16:18:34 ON 23 FEB 2003

L1	6399 S TRANSFOR? PLANT
L2	4693 S MOD? PLANT
L3	5140 S (L1 OR L2) AND SEQUENCE
L4	2 S L3 AND VISCOSITY ONSET
L5	2 S L3 AND ONSET TEMPERATURE
L6	2 S L4 OR L5 AND POTATO STARCH SYNTHASE

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:592269 CAPLUS

DOCUMENT NUMBER: 127:187509

TITLE: Cloning and expression of soluble starch synthase of potato tubers and use of the enzyme for producing modified starch

INVENTOR(S): Smith, Alison Mary; Marshall, Jacqueline; Edwards, Elizabeth Ann; Martin, Catherine Rosemary

PATENT ASSIGNEE(S): National Starch and Chemical Investment Holding Corporation, USA

SOURCE: Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 779363	A2	19970618	EP 1996-309004	19961211
EP 779363	A3	19980520		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9674268	A1	19970703	AU 1996-74268	19961211
AU 723475	B2	20000824		

PRIORITY APPLN. INFO.: GB 1995-25353 A 19951212

AB The cDNA encoding a sol. starch synthase was isolated from potato (*Solanum tuberosa* cultivar Desiree) tubers and its amino acid **sequence** deduced. The purified enzyme exhibits 100-140 kDa on SDS-PAGE. A transgenic potato plant expressing the antisense **sequence** of sol. starch synthase produced starch having a **viscosity onset** temp., as detd. by differential scanning calorimetry, lowered by at .gtoreq.5.degree.C compared to starch extd. from the non-**transformed plants**. Reduced sol. starch synthase activity affected the shape of starch granules, but had little effects on the amylose content.

L6 ANSWER 2 OF 2 USPATFULL

ACCESSION NUMBER: 2000:106076 USPATFULL

TITLE: High amylose starch from transgenic potato plants

INVENTOR(S): Cooke, David, Oakley, United Kingdom
Gidley, Michael John, Raunds, United Kingdom
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Westcott, Roger J., Wellingborough, United Kingdom

PATENT ASSIGNEE(S): National Starch and Chemical Investment Holding Corporation, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6103893		20000815
	WO 9526407		19951005
APPLICATION INFO.:	US 1996-716449		19960924 (8)
	WO 1995-GB634		19950322
			19960924 PCT 371 date
			19960924 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1994-6022	19940325
	EP 1994-305806	19940804

EP 1995-300210 19950113

DOCUMENT TYPE: Utility
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PRIMARY EXAMINER: Guzo, David
ASSISTANT EXAMINER: Larson, Thomas G.
LEGAL REPRESENTATIVE: Kaiser, Karen G.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 753

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of producing altered starch from transformed potato plants or their progeny, comprising extracting starch from a potato plant, at least the tubers of which comprise at least an effective portion of a starch branching enzyme (SBE) cDNA **sequence** operably linked in the antisense orientation to a suitable promoter, such that the level of SBE activity is limited to less than 0.8 units per gram tuber. Also disclosed are potato plants comprising altered starch in accordance with the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.